

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (previously presented): A fixing device comprising:

a heating roller brought into pressure contact with a pressurizing roller, the heating roller comprising:

a first heater for heating a central region of the heating roller; and

a second heater for heating side end regions of the heating roller on both sides of the central region,

wherein a peak of heat distribution of the first heater is located at or near a side end of an image region; and

wherein the first heater comprises coil filaments operable to emit light of a first amount and wire filaments which are provided alternately in the central region and further comprises holding portion filaments which are coil filaments operable to emit light of a second amount less than a first amount and which are provided on the outside of the image region.
2. (original): The fixing device according to claim 1, wherein the peak of heat distribution of the first heater is located on an outside of the side end of the image region.
3. (canceled).

4. (previously presented): A fixing device comprising:
- a heating roller brought into pressure contact with a pressurizing roller, the heating roller comprising:
- a first heater for heating a central region of the heating roller; and
- a second heater for heating side regions of the heating roller on both sides of the central region,
- wherein a peak of heat distribution of the first heater and a peak of heat distribution of the second heater are overlapped; and
- wherein the second heater comprises coil filaments operable to emit light of a first amount and wire filaments which are provided alternately in the side end regions, and further comprises holding portion filaments which are coil filaments operable to emit light of a second amount less than the first amount and which are provided in the central region; and
- wherein the peak of heat distribution of the second heater is generated by the coil filaments.

5. (canceled).

6. (previously presented): The fixing device according to claim 4, wherein a plurality of the coil filaments are provided on the second heater in each of the side end regions, and a length of one of the coil filaments located on an outer side is greater than a length of another one of the coil filaments located on an inner side.

7. (previously presented): The fixing device according to claim 4, wherein a temperature sensor is provided near at least one end of the heating roller where the peak of heat distribution of the first heater is located.

8. (previously presented): The fixing device according to claim 4, wherein a temperature sensor is provided in a central part of the heating roller.

9. (currently amended): A fixing device comprising:
a heating roller brought into pressure contact with a pressurizing roller, the heating roller comprising:

a first heater having a first coil ~~filament operable to heat a central region of the heating roller~~ filaments and first wire filaments which are arranged in a first region, and first holding portion filaments ~~holding the first coil filament~~ arranged in a second regions which are located in both sides of the first region;

a second heater having second coil filaments ~~operable to heat side end regions of the heating roller on both sides of the central region~~ and second wire filaments which are alternately arranged in third regions, and a second holding portion filament ~~holding the second coil filaments~~ arranged in a fourth region which is located between the third regions; and

a temperature sensor operable to detect a temperature of the heating roller and opposing a non-overlapping portion in which the first coil filament and the second holding portion filament are not overlapped,

wherein:

the first holding portion filaments are coil-shaped for eliminating slack of the first wire filaments;

the second holding portion filaments are coil-shaped for eliminating slack of the second wire filaments;

the first region and the fourth region are provided in a central region in an axial direction of the heating roller; and

the second regions and the third regions are provided in both side regions in the axial direction of the heating roller.

10. (canceled)
11. (currently amended): The fixing device according to claim 9, wherein the temperature sensor is provided in a the central part-region of the heating roller.
12. (currently amended): A fixing device comprising:
 - a heating roller brought into pressure contact with a pressurizing roller, the heating roller comprising:
 - a first heater having a ~~first coil filament operable to heat~~ a central region of the heating roller ~~filaments and first wire filaments which are alternately arranged in a first region,~~ and first holding portion filaments ~~holding the first coil filament~~ arranged in second regions which are located in both sides of the first region;
 - a second heater having second coil filaments and second wire filaments which are alternately arranged in third region ~~operable to heat side end regions of the heating roller on~~

~~both sides of the central region, and a second holding portion filament holding the second coil filaments arranged in a fourth region which is located between the third regions; and~~

a temperature sensor operable to detect a temperature of the heating roller and opposing an overlapping portion in which one of the first holding portion filaments and one of the second coil filaments are overlapped,

wherein:

the first holding portion filaments are coil-shaped for eliminating slack of the first wire filaments;

the second holding portion filaments are coil-shaped for eliminating slack of the second wire filaments;

the first region and the fourth region are provided in a central region in an axial direction of the heating roller; and

the second regions and the third regions are provided in both side regions in the axial direction of the heating roller.

13. (canceled)

14. (original): The fixing device according to claim 12, wherein the temperature sensor is provided on an end of the heating roller.

Claims 15 and 16 (canceled).

17. (currently amended): The fixing device according to claim 169, wherein a length of one of the ~~coil~~second holding portion filaments ~~forming each of the second coil filaments and~~ located on an outer side in the axial direction is greater than a length of another one of the ~~coil~~second holding portion filaments ~~forming each of the second coil filaments and~~ located on an inner side in the axial direction.

Claim 18 (canceled).

19. (previously presented): The fixing device according to claim 9, wherein a peak of heat distribution of the first heater and a peak of heat distribution of the second heater are overlapped in the side end regions.

20. (previously presented): A fixing device comprising:
a heating roller brought into pressure contact with a pressurizing roller, the heating roller comprising:
a first heater for heating a central region of the heating roller; and
a second heater for heating side end regions of the heating roller on both sides of the central region,
wherein first coil filaments operable to emit light of a first amount and first wire filaments are alternately provided in the first heater at the central region with phases alternated with phases of second wire filaments and first holding portion filaments which are provided in the second heater alternately at the central region; and

wherein the first holding portion filaments are coil filaments operable to emit light of a second amount less than the first amount.

21. (previously presented): A fixing device comprising:
- a heating roller brought into pressure contact with a pressurizing roller, the heating roller comprising:
 - a first heater for heating a central region of the heating roller; and
 - a second heater for heating side end regions of the heating roller on both sides of the central region,

wherein the first heater has first coil elements operable to emit light of a first amount and wire filaments which are alternately arranged so as to oppose the central region;

wherein the second heater comprises first holding portion filaments which are coil filaments operable to emit light of a second amount less than the first amount provided so as to oppose the wire filaments of the first heater.

22. (original): The fixing device according to claim 20, wherein a peak of heat distribution of the first heater and a peak of heat distribution of the second heater are overlapped in the side end region.

23. (previously presented): The fixing device according to claim 22, wherein the first heater has second holding portion filaments, which are coil filaments operable to emit light of an amount less than the first amount and which oppose the side end regions.

24. (previously presented): The fixing device according to claim 22, wherein the second heater has second coil filaments operable to emit light of an amount greater than the second amount and which oppose the side end regions.

25. (previously presented): The fixing device according to claim 24, wherein a plurality of the second coil filaments are provided in each of the side end regions, and a length of one of the second coil filaments located on an outer side is greater than a length of another one of the second coil filaments located on an inner side.

26. (original): An image forming apparatus comprising the fixing device according to claim 1.

Claims 27-29 (canceled).

30. (previously presented) An image forming apparatus comprising the fixing device according to claim 4.

31. (previously presented) An image forming apparatus comprising the fixing device according to claim 9.

32. (previously presented) An image forming apparatus comprising the fixing device according to claim 12.

33. (previously presented) An image forming apparatus comprising the fixing device according to claim 20.

34. (previously presented) An image forming apparatus comprising the fixing device according to claim 21.

35. (new) The fixing device according to claim 12, wherein a length of one of the second holding portion filaments located on an outer side in the axial direction is greater than a length of another one of the second holding portion filaments located on an inner side in the axial direction.